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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,246	02/13/2004	Seung-Yong Hwang	1315-053	4495
22429	7590	07/20/2007		
LOWE HAUPTMAN BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314			EXAMINER HAMO, PATRICK	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 07/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/777,246

Applicant(s)

HWANG ET AL.

Examiner

Patrick Hamo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This action is in response to amendments filed on May 15, 2007.

#### ***Drawings***

The replacement drawings were received on May 15, 2007. These drawings are acceptable. Objections to the drawings have been withdrawn.

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintoku et al., Pat. No. 6,293,768 in view of Ahn et al., Pat. No. 6,068,453.

Shintoku discloses a compressor with a front housing 13 and a rear housing 15 enclosing front 11 and rear 12 ends of a cylinder block, refrigerant gas inlet and outlet ports (fig. 4) on the outer peripheral surface of the cylinder blocks, discharge passageways 29 formed in the front and rear cylinder blocks and connecting to the discharge of the cylinder blocks on one side and to a main expansion portion or muffler space 24 disposed between the two passageways and formed integrally with the cylinder blocks and positioned outside of the cylinder blocks (fig. 1).

However Shintoku does not disclose the following claimed limitations taught by Ahn: a discharge conduit 89 provided to pass through a partition or inner wall 3 isolating

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suction 75 and discharge 69 chambers, thereby delivering the gas discharged toward the outside of the compressor (fig. 6), an auxiliary expansion portion or outlet chamber 92 communicating with the discharge conduit, the discharge conduit positioned at the shortest distance between the central portion of the discharge chamber and the central portion of its inlet (fig. 6), and that the discharge conduit communicates with the lower face of the outlet chamber or auxiliary expansion chamber (fig. 4) in order to effectively remove noise due to gas pulsation (col. 3, ll. 47-51).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Shintoku with Ahn in order to more effectively remove noise due to gas pulsation (col. 3, ll. 47-51).

In regards to the claimed limitations that there are front and rear discharge conduits and front and rear auxiliary expansion portions, this constitutes a mere duplication of parts and does not patentably distinguish over the prior art unless a new and unexpected result is produced. See MPEP §2144.04(6)(b).

In regards to the claimed limitations that the auxiliary expansion portion has a volume larger than that of the discharge conduit, that the main expansion portion has a volume larger or the same as a sum of volumes of the auxiliary expansion portions, that the passageway sectional areas of the discharge conduits become increase toward the outlets from the inlets, and that the length between the front discharge conduit and the outlet and the rear discharge conduit and the outlet is the same, these limitations constitute a change in size or proportion that would not perform differently than the prior

art devices, and therefore are not patentably distinct from the prior art devices. See MPEP §2144.04(4)(a).

### ***Response to Amendment***

In response to amendments to the claims received May 15, 2007, the objections to claims 1, 4-6 and 8-9 are withdrawn.

### ***Response to Arguments***

Applicant's arguments filed May 15, 2007 have been fully considered but they are not persuasive.

In response to the applicants' argument that the rejection of the front and rear discharge conduits and auxiliary portions as duplication of parts is incorrect because the applicants' structure produces a new and unexpected result, the applicants only address how this result is unexpected in view of Ahn. However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, the alleged new and unexpected results cited by the applicants are not necessarily results of including discharge conduits and auxiliary portions on front and rear cylinder blocks of a compressor, but of the other structural limitations claimed as well. In order for a rejection of obvious duplication of parts to be overcome, the parts in question

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specifically must be shown to produce a new and unexpected result in view of the prior art. See MPEP §2144.04(4)(a).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

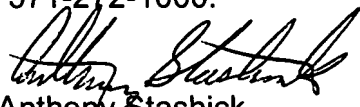
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



PH



Anthony Stashick  
Supervisory Patent Examiner  
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